



North Zone Communications Committee

Bendix King GPH Command Portable Radio



July 2007

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"Train as if your life depends on it...BECAUSE IT DOES!"



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Friday, May 3, 13

Important Information

This introduction is being presented to familiarize fire personnel to the basic operations of the Bendix King GPH-CMD portable radio. It does not necessarily cover every aspect of the radio and encourages personnel to read the publication titled: "GPH-CMD Portable Radio Owner's Manual

Objectives

- Familiarize personnel with the basic controls of the Bendix King GPH-CMD portable radio.
- Review basic operations including:
 - Battery Removal and Installation
 - Selecting a Group/Channel
 - Building and Operating a Command Group
 - Scanning/Priority Scan
 - Selecting Tones

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Bendix King GPH-CMD Basic Features

- 136-174 MHz VHF “narrowband” frequency range.
- 5 watts RF output.
- 500 channels, 25 user groups, 20 channels per group.
- On-demand Command Group – enables building a 20-channel “Command Group” from any of the 500 programmed channels.

Alkaline Battery “Clamshell”



- Holds 9 AA batteries.
- Twice the life of the NiCad Rechargeable battery.
- Standard issue is orange.
- Some clamshells may be black or gray.

Nylon Pull Tab



- Tuck in behind batteries when installing batteries.
- Pull to remove batteries

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Battery Capacity

- Some older clamshells take 10 batteries
- DO NOT* use 10 batteries, a metal spacer is required.
- Will “Overvolt” and damage the radio.



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Battery Orientation



- All positive poles go to the right.
- No need to “flip-flop” batteries like on other devices.

Battery Removal and Installation



- Locate lock tab on right side.
- Depress tab and twist battery to remove.
- To install, position tabs into their recesses.
- Rotate battery until tab clicks and locks.

Basic Controls



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Basic Controls

Transmit Indicator Light



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Basic Controls

Indicator Light

- Priority
- Busy Channel
- Low Battery



Basic Controls

Antenna

Accessory

Mount

Earphone

PTT

(Push to Talk)



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Basic Controls

Speaker

Microphone

LCD Display

Keyboard



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Basic Operations

- Turn power on by turning volume knob clockwise.
- Adjust squelch by turning squelch knob. Receive Code Guard is disabled (far counter clockwise click)
- To transmit, press the PTT switch.



Selecting Channels

- Channels are arranged in 25 groups of up to 20 channels each.
- The rotary knob selects channels in the group.



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Identifying Programmed Channels

- Channel Reference Cards are provided. (Agency Specific)
- Designed to attach to radio or radio vest.



Identifying Current Group, Channel and Tone.

- Press “#” once to display the Group
- Press “#” again to display the channel and tone you are currently using.

Identifying Programmed Channels

Group 4 Channel Settings:

	Label	RX Freq	CG	TX Freq	CG
Ch. 1	CDF CMD 1	151.35500	000.0	159.30000	000.0
Ch. 2	CDF CMD 2	151.26500	000.0	159.33000	000.0
Ch. 3	CDF CMD 3	151.34000	000.0	159.34500	000.0
Ch. 4	MVU LOCAL	151.19000	000.0	159.22500	000.0
Ch. 5	CNF DISP	168.75000	000.0	170.50000	000.0
Ch. 6	CNF ADMIN	168.15000	000.0	169.72500	000.0
Ch. 7	CDF A/G	151.22000	000.0	151.22000	000.0
Ch. 8	USFS A/G	170.00000	000.0	170.00000	000.0
Ch. 9	CDF TAC 5	151.25000	000.0	151.25000	000.0
Ch. 10	CDF TAC 12	151.46000	000.0	151.46000	000.0
Ch. 11	CDF TAC 13	151.47500	000.0	151.47500	000.0
Ch. 12	USFS TAC 2	168.20000	000.0	168.20000	000.0
Ch. 13	RED 1	155.08500	000.0	155.08500	103.5
Ch. 14	RED 2	154.17500	000.0	154.96500	103.5
Ch. 15	WHITE 1	154.28000	000.0	154.28000	103.5
Ch. 16	WHITE 2	154.26500	000.0	154.26500	103.5
Ch. 17	WHITE 3	154.29500	000.0	154.29500	103.5
Ch. 18	Ch 18	Inactive	000.0	Inactive	000.0
Ch. 19	Ch 19	Inactive	000.0	Inactive	000.0
Ch. 20	Ch 20	Inactive	000.0	Inactive	000.0

Group 4 Settings:

Group Label	MVU-CNF
Incoming Clone	Reject
Group Scan List	Yes

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Remote Speaker / Microphone



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Installing Speaker / Microphone

- Cord points “up”.
- Tighten thumbscrew



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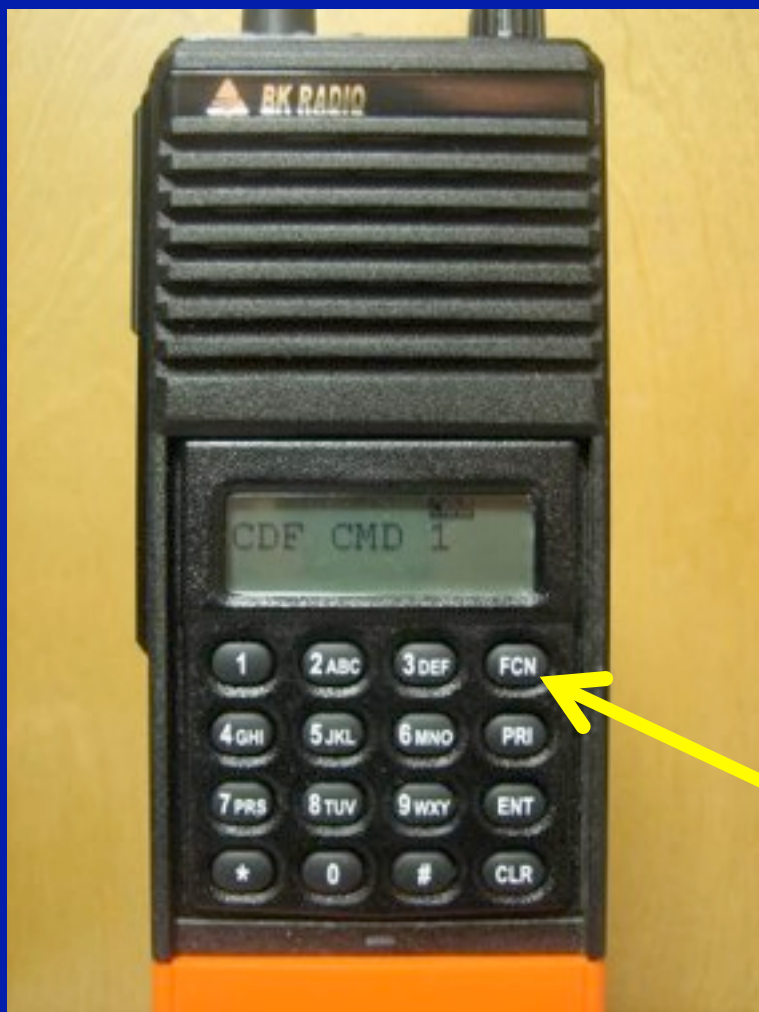
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Hi / Low Volume Switch



- Switch pointing “out” is high volume.

Locking and Unlocking the Keyboard



- To lock an unlocked keypad, press [FCN] key once.

- To unlock a locked keypad, press [FCN] key once.

Understanding Groups

- Channels are arranged in 25 groups of up to 20 channels each. Groups are numbered 01-25.



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Understanding Groups (continued)

- The “Command Group” is an additional group to give a user the ability to create a scan list of channels from multiple groups. This group is labeled “GRP CMND”



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Understanding Groups (continued)

- Group “15” is left open for major incident radio plan cloning. This will normally be completed at the Communications Unit at Base Camp.
- If your portable was cloned by the Communications Unit at the incident, have your agencies communication technician reprogram the radio with your agencies data file. This will ensure that all of the programming parameters are returned to their original settings.

How To Change Groups

- Turn off both scan switches (down) before doing the following:
- To change groups: press [#] followed by the 2 digit group number and then press [ENT] key.
- Example:
 [#], [04], [ENT]



How To Change Groups (continued)

- ***Practice:***

- ***Change to group 04.***

- ***Change to group 01.***

- ***Change to group 25.***

How To Add And Remove Channels To A Scan List (While in Groups 01-25)

- Turn off both scan switches (down) before doing the following:

- To add current channel to a scan list: press the [ENT] key.

- To remove current channel from a scan list: press the [CLR] key.



How To Add And Remove Channels To A Scan List

- ***Practice:***

- ***Change to Group 4.***
- ***Add Command 2, CDF Tac 5 and CDF Air to Ground to scan list.***
- ***Remove CDF Air to Ground from scan list.***

Channels recommended for a scan list.

- *Assigned Command channel.*
- *Assigned Tactical channel.*
- *Assigned Air to Ground channel.*
- *Air Guard (if assigned to incident).*

How To Add A Priority Channel

- Turn off both scan switches (down) before doing the following:
 - Turn the Channel Selector knob to desired priority channel.
 - Press the [PRI] key. A “PR” appears in display indicating that channel is the priority channel.

Building A Command Group

- The GPH-CMD radio allows construction of a Command Group of up to 20 channels, drawn from any of the programmed channels in the radio.
- To add or delete channels to the Command Group, turn off both scan switches (down) before programming.

Building A Command Group (continued)

- While operating in a group other than the Command Group (group 1-25), the user selects a channel in the radio and presses the [*] key to enter the channel into the Command Group.
- After adding a channel, the display momentarily shows “CMND CHAN XX” where XX is the channel number (1-20).

Operating From The Command Group

- To change groups to “Command Group”: press [#] twice and then press [ENT] key.
- The rotary knob selects channels in the group.
- To delete channels in the Command Group, press [*] while on the selected channel.
- Exit the Command Group to add new channels.

Operating From The Command Group

•Practice

- Change to Group 4 and add CDF Command 1 and CDF Air to Ground to Command Group.**
- Change to Group 5 and add RRU Support 6 to Command Group.**
- Change to Command Group and verify channels have been entered.**

Priority Operation

- Slide priority switch up.
- Scans the priority channel as well as the channel selected by the channel selector knob.
- If message received on programmed priority channel, radio locks onto that channel until message is complete.



Scan Operation

- Slide scan switch up.
- Scans all channels programmed into scan as well as the channel selected by the channel selector knob.



Priority Scan Operation

- Slide scan and priority switch up.
- Scans the priority channel, all channels programmed into scan as well as the channel selected by the channel selector knob.
- If message received on programmed priority channel, radio locks onto that channel until message is complete.



Priority Scan Operation

- ***Practice***

- ***Switch to Command Group.***

- ***Scan channels with CDF Tac 5 as the priority channel***

Programming Tones

- Turn Direct/Repeater switch to “ RPT”
- Turn off both scan switches (down) before programming tones.
- While on a channel that is “Enabled”, enter a number from 1-16 representing the desired tone. The display will show the desired tone.
- The GPH Command allows for a specific tone to be assigned to individual channels within the group.
 - Example:
[4]



Programming Tones

• *Practice*

- *Switch to Group 4, Monte Vista Local.*
- *Switch to Tone 4.*
- *Switch Tone off.*



Agency Specific Variations

- Some buttons, toggle configurations and radio functions can be individually configured by each agency and can vary even within an agency.
- Be aware of this when sharing radios on an incident.

Review of Objectives

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Learn to use it before you need it!



Remember LCES!

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